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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,672	02/12/2001	Brent Iverson	MXGN:005USC1/SLH	1042
7590	06/28/2005		EXAMINER	
Steven L. Highlander, Esq. FULBRIGHT & JAWORSKI L.L.P. Suite 2400 600 Congress Avenue Austin, TX 78701			DO, PENSEE T	
			ART UNIT	PAPER NUMBER
			1641	
			DATE MAILED: 06/28/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/782,672	IVERSON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Pensee T. Do	1641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 February 2002.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 60-63 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 60-63 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Amendment Entry & Claim Status***

The preliminary amendment filed on February 13, 2002 has been acknowledged and entered.

Claims 1-59 have been cancelled. Claims 60-63 are pending.

The request for interference has been acknowledged and entered. However, this application is not in condition for interference yet because there is a 112, 1<sup>st</sup> paragraph issue that needs to be resolved.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 60-63 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants have amended the claims recite that the "organisms are extremophiles" in claim 60, "wherein the extremophiles are thermophiles" in claim 61 , "wherein the extremophiles are selected from the group consisting of hyperthermophiles, psychrophiles, halophiles, psychrotrophs, alkalophiles and acidophiles" in claim 62 and "wherein the DNA for generating the library is obtained

using a *culture-independent system*" in claim 63. However, there is no sufficient support in the specification for these limitations. Applicants amended the specification (preliminary filed on August 02, 2001) to describe these limitations after copying the claims from the Short et al. patent (US 6,174,673) the patent which claims potentially interfered subject matters with the present invention. Applicants have pointed out support for these limitations in page 3, line 24 [*In one notable example, Liad et al. (1986) reported the isolation of thermostable variants of the E. coli kanamycin nucleotidyl transferase by introducing the gene in a thermophilic bacillus and selecting for mutants that could grow at a temperature above the inactivation temperature of the thermostable enzyme*] and page 12, line 5 [*Efforts to engineer improved enzymes rely upon molecular biology techniques and involve two basic approaches. The first involves cloning and expression of enzyme libraries from organisms that cannot be cultivated and typically are isolated from extreme environment.*] of the original specification. However, these descriptions are merely background information and are irrelevant to the claimed invention which is a method for identifying polypeptides having a desired activity using high throughput screening of genomic DNA. The specification discusses these background information and disadvantages of using such background information. For example, on page 12, lines 11-14, the specification describes that "However, it is intrinsically limited to catalytic activities that serve a biological function. Also, it is limited by the ability to employ genes from unknown sources to direct the synthesis of functional properties in commonly used host organisms such as E. coli or Saccharomyces cerevisiae.

Regarding the amended limitations recited in claims 61-63, Applicants rely on the amended specification filed in August 02, 2001 for support. This is obviously a new matter situation.

**Remarks**

Claims 60-63 are free of prior arts.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pensee T. Do whose telephone number is 571-272-0819. The examiner can normally be reached on Monday-Friday, 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pensee T. Do  
Patent Examiner  
June 15, 2005

  
LONG V. LE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

06/24/05